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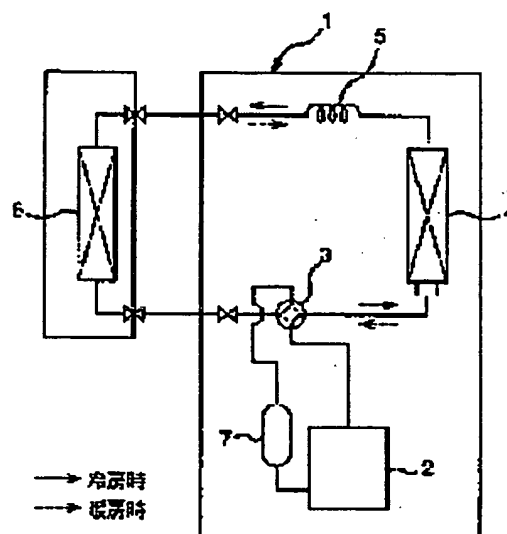
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## (54) REFRIGERATING MACHINE OIL AND REFRIGERATION UNIT

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To obtain a refrigerating machine oil securing its lubricity when used together with a HC-based refrigerant and enabling the amount of the refrigerant to be suppressed.

**SOLUTION:** This refrigerating machine oil to be used together with a HC-based cooling medium in the compressor 2 of an air conditioning machine 1 is a composition I, II, III or IV, shown by the respective chemical formulas described below, or a mixture thereof. Thereby, this machine oil affords such advantages as to lower the solubility of the cooling medium therein to effect prevention of decreasing its lubricity in association with the decrease in viscosity and reduce the unnecessary amount of the cooling medium to be used. composition I:  $R1-(CH_2CH_2O)_1-R5$ , composition II:  $R2-[CH(CH_3)CH_2O]_m-R6$ , composition III:  $R3-(CH_2CH_2O)_o[CH(CH_3)CH_2O]_p-R7$ , composition IV:  $R4-[CH(OR_9)CH_2]_n-R8$  where, (I), (m), (n), (o), (p) are each a natural number, R1 to R4 are each H, OH, a 1-8C hydrocarbon group or alkoxy group, R5 to R8 are each the same as R1 to R4, respectively, except OH, R9 is H or a 1-4C alkyl group.



## LEGAL STATUS

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